Daffah Infrastructure requirement.

Solution and Architecture.

Storage Requirement 20TB Hybrid	2 Hypervisor Servers for Virtualization.	Active Directory Migration	Exchaneg Migration

Solution Components. Example: Below
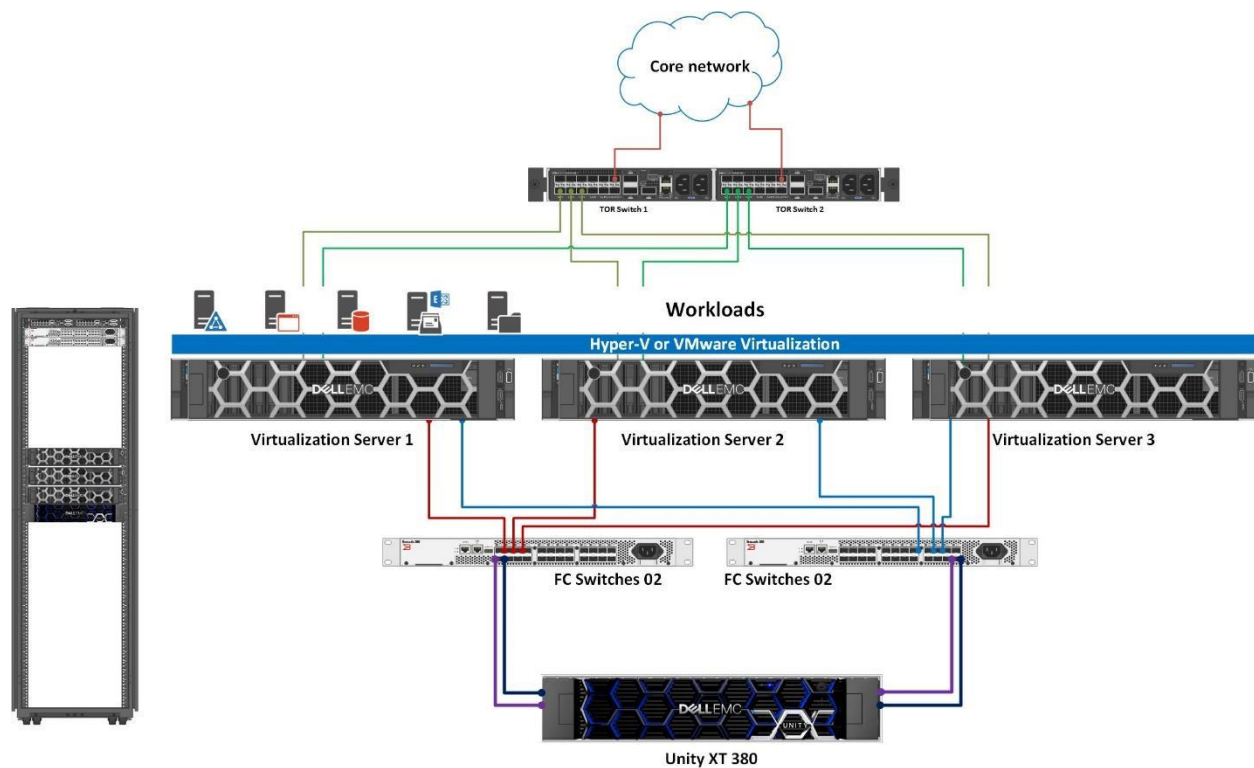

Virtualization servers.

•

•   3 X Rack Server

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•   2 X Intel Xeon Gold 6246R 3.4G, 16C/32T, 10.4GT/s, 35.75M Cache, Turbo, HT

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•   32 Physical Cores per Server.

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•   Virtual Cores Per Server 1:2 Ratio

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•   96 Virtual Cores per Servers 1:3 Ratio

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•   Total Cluster vCPU Capacity 288 1:2 Ratio

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•   Total Cluster Processing Capacity 326GHz

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        12 X 32GB RDIMM, 3200MT/s, Dual Rank

        36 X 32GB **768GB** Cluster memory. (1152GB

-
- 2 X Windows Server 2019 Datacenter,16CORE (Unlimited VM's
-
- 6 X Windows Server 2019 Datacenter,16CORE (Unlimited VM's)
-
- Network 6 X 10GB Ports Dual Nic

- Unity 380 XT Storage 24TB Usable.
-
- 2 X Fibre Channel DS-6610B 8P/24P switch (Includes 8x16Gb SFPs + rack kit).
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- 2 X Networking Dell EMC Switch S4112F, 12 x 10GbE SFP+, 3 x 100GbE QSFP28

Solution Sizing Details.

Storage 24TB Usable → 288vCPU Cores → 768GB Cluster memory
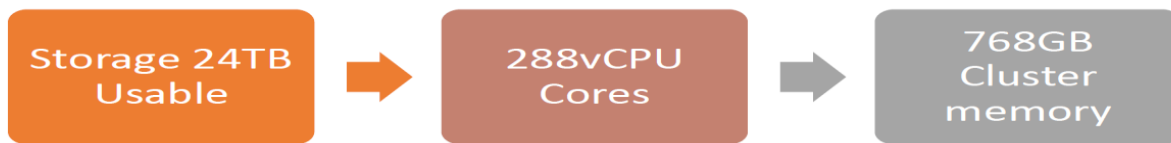
New Rack Server Installation and Configration:

1. Installed New Hardware to the rack
2. Physical Installation in windows 2019
3. Hyper V configuration
4. Cluster
5. VM machine

Active Directory and Exchange Migration Scope.
AD AND EXCHANGE MIGRATION
AD Upgrade

1. Backup the existing AD Server (System State)
2. Create new VM and install Windows 2019
3. Windows update and Security patches.
4. Enable Active directory roles, DNS and DHCP.
5. Transfer FSMO roles to newly created DC2019 Server
6. Migrate any existing AD roles to the new Server
6. Demote old Active directory Servers - Activity will be initiated after one day monitoring.
7. Install and configure additional domain controller.

Exchange Upgrade

01. Backup the Mailbox Database of the existing Exchange Servers.
02. Update latest CU for existing Exchange Servers, if necessary.
03. Create New VMs and install Windows 2019
04. Windows update and security patches
05. Install Exchange 2019 pre-requisites on both the production servers
06. Run the Exchange Server Setup
07. Configure Exchange 2013 to 2019 Migration co-existence
08. Add the CA Certificate to New Servers.
09. Migrate Mailboxes to Exchange 2019 Servers
10. Configure new connectors in the Exchange Server 2019
11. Migrate Client Access and Mail flow to 2019.
12. DNS Round Robin for Exchange Server.
13. Reconfigure DAG and add New Servers.
14. Test all functionality for OWA, Outlook anywhere and Active Sync.
15. Decommission Exchange 2013 Servers.

DR Setup

AD SETUP:
01. Create new VM and install Windows 2019
02. Windows update and Security patches.
03. Enable Active directory roles, DNS.
04. Configure different AD Site.
05. Test and verify the AD replication.

EXCHANGE SETUP

01. Create New VM and install Windows 2019
02. Windows update and security patches
03. Install Exchange 2019 pre-requisites in the Server.
04. Run the Exchange Server Setup.

05. Add Server to existing DAG.

06. Add the Database copy from the production Exchange Server

07. Test Mail flow